

REMARKS

In the Office Action dated May 5, 2004, the Examiner rejected claims 1, 2, 4, 7-17 under 35 U.S.C. § 102(b) and claims 1-10, 13-20 under 35 U.S.C. § 103(a). Claims 1, 2, 5, 13, 16, 17, and 19 have been amended. No new matter has been added. Applicant respectfully traverses the claim rejections and requests reconsideration.

A. Response to the Kaiser 35 U.S.C. § 102(b) Rejections

Claims 1, 2, 4, and 7-17 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,936,842 ("Kaiser"). Applicant respectfully traverses these rejections.

The main features of Applicant's invention may be summarized as follows. As stated in the introduction of Applicant's specification, stand alone transformers for use in electrical equipment are often encapsulated in an opaque plastic cap, firstly to electrically insolate the transformer and secondly to protect it against the elements. Such a prior art transformer is shown in figure 1 of Applicant's specification. In use, heat is generated by the transformer and the generated heat results in unwanted electrical losses. Because the opaque cap does not transmit the generated heat, the heat is not dissipated effectively. This may cause damage to the transformer and, as stated hereinbefore, give rise to unwanted electrical losses.

Applicant's claimed invention provides an electrical assembly comprising a transformer and an electrically insulating cover therefor, the transformer being exposed to a translucent part of the cover, to transmit heat generated by the transformer beyond the cover, thereby to dissipate that heat. The heat is radiated as an electromagnetic wave and transmitted outwardly by the translucent part of the cover. A secondary feature of the applicant's invention is that the transformer may be encapsulated in a cover of the aforementioned kind. The encapsulation or cover may be in the form

of a skin for the transformer.

The Examiner's continued rejection of claims 1, 13, and 16 on the basis of Kaiser is fundamentally flawed. Kaiser discloses a housing for an electrical drive unit. Referring to figure 1, the housing comprises a first part 12 and a second part 14. The first part 12 comprises a base 30 presenting a floor 46 and walls 32 which are perpendicular to base 30 (see column 2 lines 56 to 64). The second part 14 comprises walls 38 (see column 3 lines 1 to 3). A transformer 22 is located in a top right hand corner of first housing part 12. A chamber 76 (shown in figure 2) for a lighting device 78 is defined towards the left hand bottom corner of the second housing part 14. A wall 70, 74 extending from the floor 46 separates the chamber 76 from the rest of the housing (see column 3 lines 48 and 49). Furthermore, the second housing part 14 has a wall 88 which corresponds and abuts against wall 74, with the result that, in the assembled state, the aforementioned chamber 76 is closed all around (see column 3 lines 58 to 61). In the region of the lighting device 78, the second housing part 14 is beveled and provided with a cover 90.

Nowhere in the description of the exemplary embodiments is it disclosed that the cover is translucent. Only in claim 5 and a corresponding passage in column 2 line 7 are there references to a translucent cover. More particularly, claim 5 comprises a claim element which recites: "one housing part has a translucent cover which is connected.....and by way of which the lighting element of the lighting device can be exchanged." Even if one assumes that this translucent cover is the cover 90, then that cover 90, which is located in a region diagonally opposed and far removed from transformer 22, is furthermore completely closed or shielded off from the transformer 22 by the aforementioned abutting opaque internal walls 74 and 88 inside the housing. Hence, there is no basis for saying the cover 90 inherently transmits heat generated by the transformer 22.

Thus, Kaiser does not show or suggest a transformer and an electrically insulating cover

therefor, wherein the transformer is exposed to a translucent part of the cover. Because Kaiser does not show or suggest each and every element of claims 1, 13, and 16, Applicant submits that Kaiser does not anticipate claims 1, 13, and 16.

Claims 2, 4, and 7-12 depend from claim 1. Claims 14 and 15 depend from claim 13. Claim 17 depends from claim 16. Accordingly, Applicant also submits that Kaiser does not anticipate claims 2, 4, 7-12, 14, 15, and 17 for at least the reasons set forth above.

In light of the above, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102(b).

B. Response to the Noone 35 U.S.C. § 103(a) Rejections

Claims 1-10 and 13-20 were rejected under 35 U.S.C §103(a) as being obvious in light of U.S. Patent No. 4,791,290 ("Noone"). Applicant respectfully traverses these rejections.

The rejection based on Noone is flawed in that the Examiner again reads far too much in the disclosure of Noone. Noone relates to a photoelectric control unit for street lighting with a cooling chamber. The unit 1 comprises a printed circuit (PC) board housing 30 with opaque side walls 32. The housing houses a PC board 2. The unit further comprises a cooling chamber 8 where heat generated in pins 4 is dissipated through the walls 10 of the chamber 8. This is to prevent damage to the components on the PC board 2 (see column 4 lines 9 to 15). The unit 1 comprises a translucent cover 41 through which light passes to a photoelectric sensor on the PC board 2. The unit also comprises a transformer which is designated TRF1 in figure 9. There is absolutely no disclosure or suggestion in the specification of where in the unit 1, the transformer is located.

There is hence no basis for saying that the transformer TRF1 is exposed to the cover 41 and of saying that there is inherent transmission of heat generated by the transformer TRF1 through the

cover 41. In the absence of a disclosure of where the transformer TRF1 is located, it may be noted that it would be a bad engineering decision to locate the transformer TRF1 on a top surface of the PC board 2 and it is hence extremely unlikely that it is located on that surface. On that surface, the transformer would be subjected to direct sunlight, heat and hence an exaggeration of the problems referred to in the introduction of the specification and which Applicant's claimed invention is aimed at reducing. In the very unlikely event of the transformer TRF1 being located on the top surface, the transformer is most probably encapsulated as in the prior art and as shown in figure 1 of Applicant's specification, to protect same against the elements, including sunlight and wherein it would not be exposed to translucent cover 41, so that heat generated thereby may be transmitted outwardly.

The self evident problems with heat on the PC board are borne out by the need to cool the pins 4 in the cooling chamber 4, to prevent damage to the components on the PC board 2. If the transformer is located on a bottom surface of the PC board, the transformer would not be exposed to the translucent cover, as cited in Applicant's amended claim 1. However, it is most likely that the transformer is housed in a region of the unit 1 where it is not exposed to external heat, such as in wall portion 55, where it is far removed from and not exposed to the cover 41, so that heat generated thereby cannot inherently be transmitted through the cover. The purpose of the cover 41 is not to transmit heat generated by the transformer, but to transmit sunlight inwardly to the photo-detector.

Hence, Noone does not show or suggest a transformer and an electrically insulating cover therefor, wherein the transformer is exposed to a translucent part of the cover. Because Noone does not show or suggest each and every element of claims 1, 13, and 16, Applicant submits that claims 1, 13, and 16 are not obvious in light of Noone.

Claims 2-10 depend from claim 1. Claims 14 and 15 depend from claim 13. Claims 17-20

depend from claim 16.

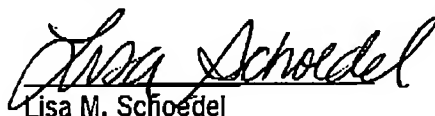
In light of the above, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 103(a).

CONCLUSION

In light of the above amendments and remarks, Applicant submits that the present application is in condition for allowance and respectfully request notice to this effect. The Examiner is requested to contact Applicant's representative below if any questions arise or she may be of assistance to the Examiner.

Respectfully submitted,

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